

1 What is claimed is:

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3 1. A washing machine comprising:

4 a cabinet;

5 a drum;

6 a motor; and

7 a brake resistance assembly comprising:

8 a case forming an exterior;

9 first and second connect terminals fixed to the case to be connected

10 to an external circuit;

11 first and second bobbins provided in the case; and

12 first and second coils differing in resistance to be wound on the first

13 and second bobbins, respectively.

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15 2. The washing machine as claimed in claim 1, wherein one ends of the first

16 and second coils are connected to the first and second connect terminals, respectively and the

17 other ends of the first and second coils are connected to a common terminal.

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19 3. The washing machine as claimed in claim 1, wherein the first coil is thinner

20 than the second coil.

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22 4. The washing machine as claimed in claim 1, wherein the resistance of the

23 first coil is greater than the second coil.

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25 5. The washing machine as claimed in claim 1, wherein the first and second
26 coils are formed of Al and Cu, respectively.

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28 6. The washing machine as claimed in claim 1, wherein the first coil is melted
29 to be cut off when a voltage over a predetermined level is applied to both ends of the first coil.

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31 7. The washing machine as claimed in claim 1, wherein a rugged part is formed
32 on an outside of the case to increase a heat-exchange area thereof.

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34 8. The washing machine as claimed in claim 1, the case comprising:
35 a first partition having the first and second connect terminals fixed thereto; and
36 a second partition leaving a predetermined distance from the first partition.

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38 9. The washing machine as claimed in claim 8, wherein a space between the
39 first and second partitions in the case is filled up with an insulator having good heat
40 conductivity.

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42 10. The washing machine as claimed in claim 8, wherein a molding material is
43 provided to outsides of the first and second partitions in the case.

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45 11. A brake resistance assembly comprising:
46 a case forming an exterior;
47 first and second connect terminals fixed to the case to be connected to an external
48 circuit;

49 first and second bobbins provided in the case; and
50 first and second coils differing in resistance to be wound on the first and second
51 bobbins, respectively.

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53 12. The brake resistance assembly as claimed in claim 11, wherein one ends of
54 the first and second coils are connected to the first and second connect terminals, respectively
55 and the other ends of the first and second coils are connected to a common terminal.

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57 13. The brake resistance assembly as claimed in claim 11, wherein the first coil
58 is thinner than the second coil.

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60 14. The brake resistance assembly as claimed in claim 11, wherein the resistance
61 of the first coil is greater than the second coil.

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63 15. The brake resistance assembly as claimed in claim 11, wherein the first and
64 second coils are formed of Al and Cu, respectively.

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66 16. The brake resistance assembly as claimed in claim 11, wherein the first coil
67 is melted to be cut off when a voltage over a predetermined level is applied to both ends of
68 the first coil.

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70 17. The brake resistance assembly as claimed in claim 11, wherein a rugged part
71 is formed on an outside of the case to increase a heat-exchange area thereof.

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73 18. The brake resistance assembly as claimed in claim 11, the case comprising:
74 a first partition having the first and second connect terminals fixed thereto; and
75 a second partition leaving a predetermined distance from the first partition.

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77 19. The brake resistance assembly as claimed in claim 18, wherein a space
78 between the first and second partitions in the case is filled up with an insulator having good
79 heat conductivity.

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81 20. The brake resistance assembly as claimed in claim 18, wherein a molding
82 material is provided to outsides of the first and second partitions in the case.